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The secret life of UK trade credit supply: Setting a new research agenda

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Abstract

Trade credit management represents an important strategic opportunity for firms to enhance performance, liquidity and profitability. This paper synthesises existing understandings of trade credit, with particular (but not exclusive) reference to the UK, with a view to identifying a research agenda in this field. The size, macroeconomic significance, absence of regulation and presence of significant internal risk associated with trade credit suggest that such an enhanced meta-level understanding of this substantial financial market that shadows regular business-to-business operations is imperative. The paper synthesises what is known about the basic parameters of trade credit operations, suppliers' motivations and imperatives for granting credit to trade customers and the factors that determine credit periods and terms. We identify where further research would advance understanding in this area.

Keywords: Trade credit; Trade credit management; Credit terms; Credit policies; Further research

1. Introduction

The term ''trade credit'' refers to a variety of heterogeneous, unilaterally determined systems and arrangements under which individual suppliers of products or services[1] trust their trade customers to defer payment for some designated period. Trade credit is something of a Cinderella subject—often neglected and rarely understood (Samuel et al., 1990; Mian and Smith, 1992; Pike et al., 1998; Ng et al., 1999; Wilson, 2003; Paul, 2007). It is possible that one cause of this neglect, both in terms of research focus and commercially, is that trade credit does not coincide precisely with any specific academic or management expertise domains. Rather, it encompasses financial accounting, financial management, management accounting and indeed treasury functions generally.

This relative lack of interest is somewhat surprising for at least four reasons. First, trade credit is greater in volume than short-term bank credit in nearly all developing and industrialised countries (Blasio, 2003). UK trade credit

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[1] In this paper, we refer to products and services collectively as ''goods''.

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follows this trend—currently standing at around 37% of total business assets (Paul and Wilson, 2006).[2] Debtors constitute an average of 40% of small firms' total assets (Wilson et al., 1996), whilst trade credit in the UK exceeds the primary money supply by an average factor of 1.5 (Wilson and Summers, 2002). Likewise, in the USA trade credit supply "…represented approximately 2.5 times the combined value of all new public debt and primary equity issue during a year… trade credit exceeds the primary money supply by a factor of 1.5 on average" (Ng et al., 1999, p. 1109). "Trade credit is one of the most important forms of financing… [exceeding] the business lending of the entire banking system" (Lee and Stowe, 1993, p. 285). Aaronson et al. reported that "60.8 percent of firms had outstanding credit from suppliers" (Aaronson et al., 2004, p. 47). Trade credit is therefore a very substantial financial market.

Second, by virtue of its size, trade credit is macroeconomically significant. For instance, in a study of 355 UK companies Paul and Wilson (2006) found that 87% sold between 80% and 100% of their goods on credit, with one third granting credit on every business transaction. It follows that instabilities or dysfunctions in the operation of trade credit policies and practices could have serious macroeconomic consequences.

Third, despite its size and significance, this virtually unregulated and largely informal financial market has grown organically and has low visibility. It has a very large number of both suppliers and customers operating under a diverse range of arrangements that exacerbate market complexity.

Fourth, this sizeable and unregulated form of credit represents a significant cash-flow risk for suppliers through late or non-payment. The extent of this risk is often not appreciated by suppliers who, for instance, frequently delegate the trade credit function to non-specialist departments within the organisation (Pike and Cheng, 1996; Wilson et al., 1995; Paul and Wilson, 2006). Paul (2004) found that most respondents located the credit function within a department/section such as sales, marketing or finance. This can be problematic as sales and credit functions may have conflicting organisational objectives, with credit management all too often relegated to a position of secondary importance (Paul, 2007).

These factors—overall size, macroeconomic significance and the absence of regulation combined with the presence of significant internal risk—suggest that an enhanced meta-level understanding of trade credit as a substantial financial market that shadows regular business-to-business operations is imperative. In particular, the size, extent and nature of trade credit supply in the UK indicates that, despite evident significant risk factors, the rewards for giving credit are deemed acceptably proportionate by firms. Given the heterogeneity of trade credit arrangements in the UK, comprehensive firm-level explanations of the motivations and imperatives and of how these impact on the nature of the facilities extended are desirable but currently unavailable.

This research begins to address this lacuna in two ways. First, we draw together and synthesise existing but dispersed research on the supply of trade credit with the aim of producing a codified account of what is currently understood. Second, and building on this synthesis, we identify possible further research agendas that would provide useful knowledge in this area.

This paper is organised into three further sections. Section two describes the basic parameters of trade credit operations. Section three explores suppliers' motivations and imperatives for granting credit to trade customers. In section four, we explicate the factors that determine credit periods and terms. This is followed by some conclusions.

2. Trade credit basics

At its simplest, trade credit occurs when traders allow time to elapse between supplying goods and receiving payment. Demand for credit may arise because imperfections in product and capital markets can cause financial institutions to limit credit supply to businesses, forcing the latter to use trade credit as an alternative form of financing. This is a somewhat unusual financial market: neither the demand for nor the supply of credit constitutes the principal purpose of the underlying (trading) transactions or, indeed, of the businesses that are party to it. Trade credit therefore functions as a facilitative financial vehicle.

Extending trade credit suggests that the risks inherent in delaying the receipt of payment for goods (for instance cash flow or non-payment) are outweighed by the rewards. This suggests that the way in which trade credit is organised, managed and monitored is of crucial importance to ensure effective risk management. Wilson et al. (1995) found that firms that invest in more sophisticated credit management practices and give more importance to "front-end"

[2] This is a 2004 figure as against 35% in the survey by Summers and Wilson (2000) and 21% in Pike and Cheng (1996).

credit management (i.e. risk assessment) display lower debtor days, fewer bad debts and, consequently better cash-flows.

Trade credit arrangements and their management are heterogeneous between, and often within, firms—this is, as we have noted, an unregulated and dynamic field that tends to grow organically. Trade credit may be partially or entirely managed in house, or outsourced to a third party. Thus, the locus of management may reside in a separate credit company, a subsidiary, a central credit department or simply a sub-division of another department such as sales, marketing or finance. The factors that determine where and how trade credit is managed may be historic, strategic, market oriented or purely financial in nature (Paul, 2004). Christie et al. (1991) argue that the main determinant of trade credit organisation and administration is firm size. Mian and Smith (1992) predict that larger firms are more likely to have specialised credit subsidiaries. Wilson et al. (1995) found a relationship between having credit insurance and trade credit management.

Smith and Schnucker (1994) and Wilson et al. (1996) point to the relationship between the use of external agents (as in factoring) and the lack of access to financial institutions' funds—suggesting that the latter can be a determining factor in trade credit management. Summers and Wilson (1998) report that the use of third parties such as debt factors is historically and traditionally associated with specific industries. Pike and Cheng (2001) report that the availability of a wide range of specialist intermediaries means that non-core trade credit activities can be contracted out to allow firms to focus on their business strengths.

Many authors suggest that product characteristics may help to determine credit management practices. For instance, custom-made or highly specialised items may have little or no value to third parties. This severely limits the capacity of the supplier to use the money owed on such goods as collateral in its own borrowing (Williamson, 1975; Klein et al., 1978; Smith and Schnucker, 1994; Summers and Wilson, 2000).

A number of different yardsticks to evaluate trade credit management and a systematic approach to benchmarking against competitors often lie at the heart of trade credit performance monitoring processes, which use measures such as debtor days, cash collection targets, bad debt levels, and overdue accounts. Customer satisfaction measures such as repeat business, new customers, customer satisfaction and profitability indices, and defection rates (non-payment) also play a major role.

Late payment is often associated with market power position and competitiveness, technology changes and customer concentration. Nevertheless, issues such as seasonal demand, capital rationing and financial distress contribute to delinquency and default risk (Paul and Wilson, 2006). The late payment problem costs the UK economy £20 billion a year (*Accountancy Today*, 2007). Despite measures such as the late payment legislation (*The Late Payment of Commercial Debts (Interest) Act 1998, amended in 2000 and 2002*) and a British Standard (*Payment Voluntary Code of Practice*), late payment is still a major problem for many firms. The intention of the legislation is to encourage companies to pay within the agreed terms and possibly change payment behaviour by creating a level ''paying'' field (sic). However, CMQR (1999) reported that less than 4% of SMEs claimed to have actually used the legislation, while 30% said they were not sure about the statutory imposition of interest. Paul's survey (Paul, 2004) found that 77% of respondents admitted to having paid up to two weeks after the due date. Peel and Wilson (1996) reported that around 66% of the firms in their survey claimed that the slowest payers were large businesses. Likewise, Pike and Cheng (2001, p. 1017) explained that ''often the 'guilty' parties are alleged to be large, ruthless companies, unsympathetic to the financial pressures on smaller suppliers and customers''. In the same vein, Paul (2004) reported that over 40% of large firms paid outside the agreed credit terms.

Unsurprisingly, firms that suffer most from late payment tend to be those with poor credit management practices, and vice-versa.[3] Paul (2004) found that companies that managed their credit efficiently had lower bad debts and better control of credit processes than those whose credit management was more ad hoc. Many argue that the problem of overdue accounts can be addressed by improving credit management (Institute of Directors, 1993; Wilson et al., 1996; Wilson and Summers, 2002). Peel and Wilson (1996) suggested that proactive trade credit management from the outset could prevent late payment problems. Others stress the role of credit policy formulation and application. Christie et al. (1991) argue that credit management should generate consistent credit decisions whilst Wilson et al. (1995) see credit management as a core part of corporate strategy.

[3] For instance, Pike et al. (1998) found that (in one of the firms in their study) improving IT credit management systems and procedures reduced debtor days by 13 and made a working capital saving of £4m per month.

Literature in this area is marked by plenty of empirical data on the practice of credit management. However, these data are significantly under-conceptualised and under-theorised. For instance, the Credit Management Research Centre at Leeds University produces quarterly reviews with data on credit practices. However, most of the data relate more to what companies do rather than *why* they do it. The readily available data therefore presents plenty of scope for deepening the understanding of trade credit practice in a more rigorous and robust manner.

3. Motivations and imperatives for trade credit supply

The extension of trade credit under heterogeneous arrangements suggests that suppliers are responding to diverse imperatives and attempting to manage the resultant risks in a variety of ways. This section first examines these motivations and then considers how the resultant risks are managed.

3.1. Granting credit

The potential rewards associated with trade credit risks are related to market imperfection and information asymmetries, transaction costs, price discrimination and finance. We discuss each of these in turn.

3.1.1. Market imperfections and information asymmetries

Firstly, in a market with no trade credit buyers must either pay cash from their own resources or borrow money to acquire the goods. In such circumstances, sellers do not allow buyers time to inspect/appraise the goods delivered before they pay for them. Although payment on or before delivery may not affect the buyer's legal rights to return or exchange, it may lead to delays, disputes and additional costs. Consequently, cash or third-party financed buyers may try to deal with suppliers who have a good reputation and/or who offer reliable warranties to attenuate uncertainties about sellers' performance.

Trade credit can therefore be seen as strengthening buyers' power, giving them the option of withholding payment until or unless they are satisfied with the goods. This may benefit suppliers who do not have an established reputation: trade credit can be seen as an implicit warranty of product quality. Firms with established reputations for offering quality goods tend to extend less trade credit than those without such reputations (Long et al., 1993). The credit period can therefore serve as a ''valuable opportunity for reducing asymmetries in product quality awareness'' and is a signal of product quality (Pike and Cheng, 1996, p. 12).

Trade credit may be a useful strategy for suppliers experiencing financial difficulties whose warranties may therefore be suspect. In these circumstances, buyers may see trade credit as a valuable warranty period. Such suppliers may be expected to offer longer credit periods and ''the difference between the credit and cash price can be interpreted as the price of a warranty attached to the product'' (Lee and Stowe, 1993, p. 286). Indeed, ''trade credit may be viewed as the strongest form of product warranty'' (Lee and Stowe, 1993, p. 286) as it gives buyers the option of not paying if they are dissatisfied with quality. Lee and Stowe's model shows that the existence of a ''separating equilibrium in which the size of the cash discount conveys information about product quality'' means ''lower quality producers offer larger cash discounts in order to induce buyers to pay for more of their orders with a non-revocable cash discount purchase, putting more product risk on the buyer'' (Lee and Stowe, 1993, p. 286). Higher quality producers offer lower cash discounts (and less trade credit) since they are more certain that their products will not ''fail'' in the market.

Secondly, sellers face uncertainty about buyers' creditworthiness: a buyer's reputation and a favourable credit rating can reduce concerns about non-payment (Ng et al., 1999). Signalling theory offers a rationale for the use of trade credit practices in a world where information about buyers' default risks is asymmetric—the supplier may be unsure as to whether the buyer intends to pay on time (Smith, 1987). If buyers are offered a discount for early payment but do not take it, this signals that they may have limited access to finance and serves as a ''trip wire to alert the supplier of a deterioration in the buyer's creditworthiness'' (Petersen and Rajan, 1997, p. 663.) Trade credit can therefore give sellers superior information to that available to financial institutions.

Thirdly, trade credit can offer ways of regulating demand in imperfect markets which suppliers may find preferable to mechanisms such as adjusting prices or production levels. The seller offers better credit terms when demand is low in the hope of increasing sales and, conversely, tightens these up when demand is high (Emery, 1984; Lee and Stowe, 1993; Summers and Wilson, 1998). Paul and Wilson found that ''when demand is seasonal trade credit terms may be adjusted to respond to the fluctuation in the pattern of consumption of products/services'' (2006, p. 102). Likewise, the

offer of trade credit is influenced by the durability of products: firms producing durables offer more credit than those producing perishables (Smith, 1987; Long et al., 1993).

In sum, for suppliers, trade credit can be used to signal product quality and to ascertain important information about buyers' financial health. At the same time, in imperfect markets, trade credit may be used to regulate demand. Further normative research predicated on concepts of economic rationality could be of assistance in developing theory in this area. Additionally, there is limited evidence as to whether and how firms use such information opportunities. In particular, little is understood about whether firms engage in passive (herd behaviour) usage or make conscious, proactive use of such sources. Further work could also be of assistance in explaining how firms might organise themselves proactively to collect and use such information to their trading advantage.

3.1.2. Transaction costs

Lewellen et al. (1980) argue that in efficient markets buyers would be indifferent as to whether they took trade or bank credit. Customers could even borrow from financial institutions, using the goods as collateral, at the same rate of interest as the sellers. Nevertheless, transactions are not cost-free and cost advantages can obviously arise where both goods and finance are supplied from a single source (Mian and Smith, 1992).

However, trade credit transactions take place in markets with *imperfect* information, which result in transaction costs for both parties in evaluating the potential risk and return ratio on a transaction. This information asymmetry often makes trade credit more attractive than bank credit to both buyers and sellers. Trade credit can fill finance gaps caused by such capital market imperfections (Wilson et al., 1996). Financial institutions' transaction costs are raised by the fact that they do not necessarily have such close relationships with buyers as sellers do and are therefore unable to collect as much detailed information about customers' creditworthiness (Petersen and Rajan, 1997). In the event of non-payment, suppliers may be better placed than financial institutions to minimise losses because they have superior customer and market information, particularly when customers are regular (Summers and Wilson, 1999).

Ferris' transaction cost theory (Ferris, 1981) suggests that trade credit helps reduce collection costs: in the long-run, suppliers and customers work towards better time management for deliveries/payments to optimise both inventory and cash levels. Likewise, trade credit may work as an efficient tool to manage variable demand by adjusting credit terms rather than price and/or production, both of which may be more costly (Emery, 1988). For instance, Choi and Kim found that ''when inventories accumulate, the firm increases the portion of sales on credit'' (2003, p. 19). Firms can reduce the unpredictability of cash inflows, which may be most marked in cash-based businesses due to temporal sales fluctuations, by selling on credit. This reduces uncertainty and the costs of delaying receipt and can be compensated by the ability to manage precautionary cash holdings better (Pike and Cheng, 1996). This is a hedging opportunity for both buyers and sellers, where both parties can pool trading risk related to cash flow to allow the maintenance of a lower cash balance between both parties (Ferris, 1981). Summers and Wilson refer to this as a transaction volume motive where ''the ability to group invoices for payment at predicted dates in the future may also make it easier for firms to organise payment by credit transfer'' (Summers and Wilson, 1997, p. 8).

Whilst the potential transaction cost advantages of trade credit are well conceptualised in terms of economic theory, there is a dearth of empirical evidence to demonstrate that such cost advantages are achievable.

3.1.3. Price discrimination

Trade credit can be used to price discriminate between different customers (Meltzer, 1960; Schwartz and Whitcomb, 1978; Mian and Smith, 1992; Petersen and Rajan, 1997). Credit terms may not always be enforced and suppliers may also vary two-part-terms,[4] offering higher discounts to selected customers or allowing them to take an unearned discount. Giving longer credit than initially agreed or increasing the discount rate initially offered effectively reduces the price of the product. Companies in the US, for instance, are more likely to change the credit terms they offer to match the competition than to modify prices (Hill et al., 1981). The formulation of credit terms can therefore be seen as an integrated part of the seller's pricing policy (Schwartz, 1974).

Evidence suggests that price discrimination acts as a motive for extending credit and a link between offering credit and the supplier's profit margin (Petersen and Rajan, 1997). The sales profit margin allows the seller to accept a lower profit/greater loss on the credit than a financial institution could. Sellers, unlike financial institutions, are at an

[4] For example, 2/10 net 30 means 2% discount is granted if customers pay after 10 days but if they do not take the discount they pay after 30 days.

advantage as they are looking to get a return on the offered ''package'', which includes goods, *and* finance, which in itself provides more options for price variation (Schwartz and Whitcomb, 1978; Petersen and Rajan, 1997). Such tactics are only possible where the seller has enough market power to discriminate between customers: ''trade credit is more likely to be offered the greater the returns from exploiting market power through effective price discrimination'' (Mian and Smith, 1992, p. 173). Trade credit extension can therefore facilitate surreptitious violation of price regulation (Emery, 1984). Paul and Wilson (2006) found that specific customers could influence suppliers' credit periods by paying later than the agreed date. Both overt and implicit interest rates may vary across industries due to both marketing conditions and investment requirements, with sellers incentivised ''to offer credit to a specific rich class of buyers at rates lower than those financial institutions would offer'' (Smith, 1987, p. 870).

Trade credit is therefore an important constituent element in pricing policies and can be used to generate demand and provide opportunities for sellers to differentiate their product-finance offering from competitors (Ingves, 1984). For buyers, trade credit provision is an important criterion of supplier selection, especially when sellers offer an identical mix of other variables such as quality and delivery (Shipley and Davis, 1991).

Much research in this specific area is elderly. Data on price discrimination is hard to collect as it is invisible price ''violation'' and can reflect different treatment for different customers—thus firms may not admit to this practice. Further research could utilise measures such as two-part-term variations, days sales outstanding and other unofficial agreements as a means of investigating the extent to which and how trade credit forms part of pricing policies for firms.

3.1.4. Finance

Suppliers may offer trade credit in response to financing demands from customers. So if a buyer is offered credit, this is often seen as a free source of finance unless a discount for prompt payment is offered. By delaying payment, buyers can earn interest through retaining funds or, if the alternative would have been to borrow, they will have avoided incurring interest and other charges (Summers and Wilson, 1998).

The survival of customers, especially small ones, may depend on such credit—small firms may not have much borrowing power due to their size, reputation, the nature of their assets and of their product, and high financing costs. Small growing companies can experience liquidity problems because they do not have easy access to capital markets. This all makes them heavily reliant on short-term sources of finance such as trade credit (Hutchinson and Ray, 1986). Choi and Kim show that ''trade credit is used as a substitute for bank loans to reduce transaction costs of business'' (2003, p. 30) while Paul and Wilson (2007) find that when other sources of finance are not available, firms turn to trade credit to fill financial gaps.

Suppliers should monitor the costs they thus incur in financing their customers' inventory. If customers pay late or default, suppliers incur additional costs including monitoring, chasing, dealing with discount policies if offered, interest on payment processes if applicable etc. Manufacturing suppliers obviously incur costs from the initial production of goods and hence trade credit lengthens this expenditure-payment gap (Summers and Wilson, 1998).

Schwartz's model (Schwartz, 1974) predicts that large, more financially secure firms will grant credit to smaller, less financially healthy customers. If large firms' trade debtors exceed their trade creditors, making them net suppliers of credit, they ''may provide an important mechanism for channelling finance down to those firms rationed by financial intermediaries'' (Atanasova and Wilson, 2003, p. 504). Atanasova and Wilson (2004) suggest that firms that are rationed by banks might be expected to increase their reliance on trade credit as a source of funds and vice-versa (Petersen and Rajan; 1994; 1995). Therefore, companies that can access capital markets may pass on this benefit to their customers with the intention of increasing or bringing forward sales. By investing in their customers rather than earning interest on the market, suppliers may benefit from their customers' survival through secured sales. This in turn will increase the suppliers' market share and therefore reduce the problem which market size imposes on the suppliers' own growth. If companies have excess cash, then granting credit must be compared with the opportunity cost of other uses of the money (Summers and Wilson, 1997).

Some have gone further and argued that, as credit periods lengthen and terms become more strictly applied, trade credit becomes less an instrument of trade and more an instrument of finance (Ferris, 1981), with value being added to the sales transaction by charging financing costs. This is not a business activity that smaller and/or less profitable companies can engage in: they tend to offer larger cash discounts, experience greater product returns and greater bad debt losses from customers refusing to pay for defective products (Seiden, 1964).

Further research in this area could investigate the ''helping hand'' theory that large/cash rich firms finance their customers' inventory both to secure repeat business/higher sales and to build long-term relationships. Further analysis

is needed of the opportunity costs of ''lending'' to customers through the extension of trade credit against investing elsewhere.

3.2. Credit period

We now turn to the factors that determine trade credit periods and terms. In determining their trade credit offerings firms have to take account of endogenous capacity as well as exogenous factors if they are to maintain their market competitiveness. Naturally, to remain competitive, companies need to match normal industry credit terms (Banner, 1957). The literature demonstrates that trade credit decisions are driven by considerations such as bargaining power and customer relationships. We will consider each in turn.

3.2.1. Bargaining power

Large, desirable, customers can dominate their suppliers and influence the credit terms offered to them. Suppliers may vary their terms to attract specific customers in order to achieve a certain market share (Summers and Wilson, 1999). Although trade credit is influenced by industry norms, the bargaining power of some companies may have a disproportionate effect on the credit terms offered. ''Trade credit is more likely to be offered the greater the returns from exploiting market power through effective price discrimination'' (Mian and Smith, 1992, p. 172). Suppliers may purposively use trade credit as a device to capture business and thus support sales and business growth (Summers and Wilson, 1999).

Some suppliers offer new customers credit without an explicit demand from them. This may reflect norms established by powerful buyers that ''make firms extend credit even when it results in a financial disadvantage'' (Summers and Wilson, 1999, p. 42). Where extending credit is a necessary condition of sales, suppliers may offer two-part credit to relieve their costs.

In the UK the most common credit term is net credit—that is, where payment is demanded within a period of, say, 30 days. Given the powerful position of some customers, it would be interesting to investigate why so few British firms use two-part-terms that incentivise customers to pay early and thereby reduce costs. Paul (2004) reports that only 20% of respondents always take up a discount for early payment when offered. Ng et al. demonstrate giving a 2% discount for paying within ten days as opposed to the full price at 30 days represents an implicit interest rate of 43.9%: ''this rate is the opportunity cost to the buyer should the buyer decide to forgo the discount in exchange for 20 additional days of financing'' (1999, p. 1110).

3.2.2. Customer relations

Establishing and maintaining good relationships with customers is one of the most important motives for sellers to vary credit terms (Summers and Wilson, 1999). It is in the interest of the sellers to invest in their relationships with buyers to maximise market share, particularly in highly competitive environments. This can be achieved by varying credit terms—sellers invest in their customers by offering them long credit periods with the aim of strengthening long-term relationships (Paul and Wilson, 2007).

Credit can provide an opportunity to build goodwill, enhance image and improve customer loyalty. Small, new and growing firms in particular may not have the same image, reputation, creditworthiness or borrowing power as those of larger companies and trade credit gives them the opportunity to demonstrate their capability. By virtue of the process, it also gives them the personal contacts and detailed industry knowledge that they need. Aaronson et al. (2004) argue that customer information, such as on creditworthiness, is derived from the ongoing relationships that play a major role in accessing trade credit.

Decisions to invest in relationships with buyers can take different forms. Suppliers may choose to invest in sales staff, entertainment expenditure, the development of customer-specific equipment, literature, manuals, free samples etc. (Smith, 1987). Smith notes that ''when such investments are non-salvageable, their value is lost if the buyer fails or terminates the relationship'' (Smith, 1987, p. 865)—''the seller can earn a return on the investment only if the buyer stays in business'' (Ng et al., 1999, p. 1113). Therefore, sellers will try to ensure that buyers are helped to recover from difficulties where possible and may use information from trade credit to ascertain the level of risk inherent in this.

Similarly, if a buyer has made significant and specific investments in its own capacity (for instance, by buying expensive plant) this can be construed by the supplier as evidence of commitment: ''the supplier's concern with buyers' credit is reduced if the buyer has made a significant sunk investment in the industry'' (Ng et al., 1999,

p. 1114). When sellers deal with multiple customers in the same industry then, as more knowledge is acquired (often through trade credit), they can discriminate between problems that are related to a specific customer as opposed to those which are industry-wide.

Sellers that have an interest in buyers' long-term survival might be expected to take into account not only the immediate profit margin on current sales but also the present value of any future profits on subsequent sales in deciding whether to invest in a specific customer (Petersen and Rajan, 1997). Schwartz notes that as "the growth of firms is limited by the size of their markets' firms" they "ease this constraint by financing the growth of their customers with trade credit loans" (Schwartz, 1974, p. 652).

Given the potential value of building strong customer relations through trade credit, research that investigated the role of trade credit in corporate risk management could be extremely useful in current risk-sensitive business environments. Trade credit, given its flexibility through mechanisms such as price discrimination, offers a potentially useful tool here.

4. Discussion and conclusions

In this paper, we have addressed the fact that, notwithstanding its evident importance, a lacuna exists in our understanding of trade credit. We have drawn together and synthesised existing but dispersed research on the supply of trade credit, producing a codified account of what is currently understood. Building on this synthesis, we have identified further research agendas that, we feel, merit attention.

Our paper shows that trade credit does much more than simply finance customers' inventories. It can reduce information asymmetries and transaction costs, offer sellers a more flexible approach to pricing, work as a financing instrument under which suppliers with borrowing capacity can pass on the benefit to their customers, improve cash management, and be an important strategic and competitive tool for capturing new business and building long-term relationships (Paul and Wilson, 2006). As such, it offers the prospect of being an important armament in corporate strategy.

Despite the importance of trade credit and the strategic role that its management can play in companies' overall performance, it is theoretically and empirically still a neglected and relatively under-researched area. Firms' assets are expected to work for their keep in order to add value. But although trade debtors constitute an investment in working capital and a large proportion of most corporate assets, trade credit is "seldom considered a discrete asset so little attempt is made to extract its maximum value contribution" (Wells, 2004, p. 59).

To use trade credit proactively to gain competitive advantage, companies need to understand its general importance and the contribution it can make to their business: "just as it is important to manage production, sales and stock, so it is important to manage credit" (Access Accounting Ltd, 2008). It is often claimed that in many companies trade credit is an historical practice that has always existed and no one ever thought about questioning its extension or its efficiency (Wilson, 2003). In others, it is the result of complying with the industry norms and therefore seen as a condition of sales (Pike et al., 1998). In both cases, use of trade credit is passive and any involvement credit managers may have will only come at the back-end activities (such as the chasing of overdue payments). Furthermore, companies that employ full-time credit managers traditionally regard them as debt-collectors of relatively *low* status in the hierarchy (Bass, 1991) and, despite efforts made by many to raise the profile of credit management (e.g. ICM, CMRC), the trade credit function is often not considered a core activity and is thus not resourced as a core competency (Wells, 2004).

This synthetic paper demonstrates that trade credit is a very important but neglected element of working capital management and highlights areas where new or further research could yield useful knowledge. In particular, we note that trade debtor management seems to be the "missing link" between selling goods and collecting cash. Whatever the motives for offering credit, most studies agree that companies must have a system, with clear policies to manage the credit granted to their customers and to avoid late payment—a major factor behind many UK business failures (Summers and Wilson, 2000).

There is a dearth of research-based understanding about how and, in particular, why certain credit policies are formulated and applied and the reasons that drive companies to choose different policies and practices. Thus, the development of a more rigorous conceptual/theoretical model is imperative. Readily available quantitative data could be beneficially complemented by qualitative data, offering the prospect of an enhanced understanding of trade credit practice.

In terms of the motivations and imperatives for the supply of trade credit, we have argued that further research is needed on whether and how firms use the information opportunities presented by trade credit. It would be useful to

investigate whether firms are passively (by ''herd behaviour'') letting external events dictate their credit management or whether they consciously and proactively use credit information to achieve their credit targets. Such research could be useful in assisting firms to use trade proactively for business advantage. The potential for reducing transaction costs when selling on credit is theoretically demonstrable but there is little empirical evidence to show that such cost reductions are achievable. In terms of price discrimination, further research into areas such as two-part-term variations, days sales outstanding and other unofficial agreements could cast light on practices in this area. Finally, in the area of finance, research on the use of borrowing power by some companies so that they can pass on benefit to their customers to secure future higher sales (the ''helping hand'' theory) may show the potential of trade credit as a source of finance. Further analysis is therefore needed of the opportunity costs of ''lending'' to customers through credit against investing elsewhere. Moreover, given the potential value of building strong customer relations through trade credit, research that investigated the role of trade credit in corporate risk management could be extremely useful in current risk-sensitive business environments.

Turning to the question of the credit period, we have argued that further work on the role of trade credit in corporate risk management could prove useful to those organisations working in risk-sensitive business environments due to its potential to provide flexibility.

In our continuing research, we are investigating the role and potential of trade credit extension and credit management as strategic mechanisms for competing and adding to shareholder value. The place and the role of credit managers may have to be re-evaluated in the light of the importance of trade credit and its impact on the company's performance and in some cases even its survival.

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